Food and Agriculture Organization of the United Nations

ESTABLISHING A NATIONAL FOREST MONITORING SYSTEM TO ENHANCE TRANSPARENCY AND BUILD REDD+ READINESS IN CAMBODIA

Cambodia has approximately 9.45 million ha of forest cover (53 percent of total land area), yet it lost 3 million ha to deforestation between 2000 and 2010 alone. Rapid deforestation and increased risks to slow and quick-onset weather events disproportionately affect Cambodia's rural and forest-dependent populations. Forests, however, historically served as natural sinks of greenhouse gasses (GHGs). Therefore, the Royal Government of Cambodia called for a holistic approach to natural resource management and climate change mitigation, paying special attention to deforestation, landscape degradation and GHG emissions from forestry. The project worked to establish the National Forest Monitoring System (NFMS), enabling Cambodian authorities to better collect, analyze, monitor and report data on forest cover, land use, resource management and GHG emissions. To this end, geographic information systems (GIS) and information and communication technologies (ICTs) were used in building national REDD+ readiness capacities.

WHAT DID THE PROJECT DO?

Data collection and analysis capacities of the MRV/REL Technical Team were strengthened as part of a larger effort to operationalize the National Forest Inventory (NFI) and enhance the NFMS. In coordination with the MRV Technical Team, the project provided trainings and technical support, thus reinforcing inter-institutional coordination mechanisms through data management, allometric equation development, monitoring and reporting, and using OpenForis and other open-source tools. These efforts convened line ministries, research institutions and forestry information end users. Consequently, the enhancement of Cambodia's forest information and monitoring systems strengthened the national REDD+ framework. The project also helped consolidate a national capacity development framework for the NFMS. Having established a functioning NFMS and provided technical support to reporting against the assessed forest reference level (FRL) – two eligibility criteria for results-based payments from REDD+ mechanisms – the project helped establish these essential prerequisites for REDD+ finance.

KEY FACTS

Contribution
USD 1 012 715

Duration
June 2016 – December 2019

Resource Partner
United Nations Development Programme

Partners
Ministry of Agriculture, Fisheries and Forestry (MAFF); Ministry of Environment (MoE); and Royal Agriculture University

Beneficiaries
Fisheries Administration (FiA) and Forestry Administration (FA) of the MAFF; General Department of Administration for Nature Conservation and Protection (GDCANCP) of the MoE; REDD+ taskforce; academic and research institutions; civil society organizations; forest-dependent communities and NFMS end users

IMPACT

The project supported the MAFF and MoE in collecting and collating data on land use representation and emission factors to operationalize the NFMS. These improved data collection and analysis capacities shall provide more timely and reliable data to policymaking on climate action, land and marine-based ecosystem conservation and water and food security. Likewise, these data-driven insights can inform the strategic direction to national policies (e.g. National Forest Programme 2010-2029 and National Protected Areas Strategic Management Plan 2016-2030).

SUSTAINABLE DEVELOPMENT GOALS

ACTIVITIES

- Cambodia forest cover/land use assessment for 2016 consistent with FRLs completed and endorsed by the RGC in October 2017.
- Training on OpenForis suite of forest monitoring tools, including Collect, QC/QA Checklist, SEPAL and Collect Earth, and on R for data analysis.
- GHG emissions and removal estimates (with aggregated uncertainties) for results-based payments supported, as part of Cambodia's Technical Annex to the Biennial Update Report for REDD+ results (BUR-TA), for submission to the UNFCCC.
- Time-series data on Land Use, Land-Use Change and Forestry (LULUCF) updated to support LULUCF/AFOLU reporting/planning.
- Near real-time monitoring of natural vegetation loss, monitoring of forest restoration in flooded and mangrove forests, REDD+ activity monitoring, and Spatial Monitoring and Reporting Tools (SMART) tested by the FA, FiA and GDANCP.
- Community-based patrolling tested by the FA in the Samroang Commune (Pursat Province).
- Forest regeneration monitoring tested by the FiA in the Mangrove Protection and Conservation Area (Preah Sihanouk Province) and in flooded forest conservation areas (Kampong Chhnange Province).
- Remote-sensing monitoring tested by the GDANCP in the Prey Long Protected Area and Mondulkiri Province.
- Emission factors improved based on deciduous forest/semi-evergreen allometric equations and complementary biomass models.

Project Code
FAO: UNFA/CMB/041/UND

Project Title
Establishment of a National Forest Monitoring System for Reducing Emissions from Deforestation and Degradation-plus (REDD+) readiness in Cambodia

Contact
FAO Representation in Cambodia
FAO-KH@fao.org

Partnerships and Outreach
For more information, please contact: Reporting@fao.org

Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome, Italy